

## ABSTRACT

A method to handle operation exceptions in an automated manufacturing system is achieved. The method comprises providing an automated manufacturing system comprising a means to track progress of work in process against standard process flows and a means to select product lots for processing from the work in process and to select equipment for processing the product lots based on next step information from the standard process flows. The automated manufacturing system is monitored for operation exception events. The product lots must deviate from the standard process flows. A floating process flow is selected corresponding to the operation exception event and the product lots from a floating process flow database. The floating process flow is linked to the standard process flow such that the next step is derived from the floating process flow. Manufacturing is continued using the floating process flow. The floating process flow is unlinked from the standard process flow such that the next step is derived from the standard process flow when the floating process flow is completed. A control system apparatus for handling operation exceptions in an automated manufacturing plant is achieved.